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Algonquin logging museum:  
logging history of Algonquin  
Provincial Park







THE FRIENDS OF

# Algonquin Logging Museum

Logging History in Algonquin Provincial Park

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# Algonquin Logging Museum

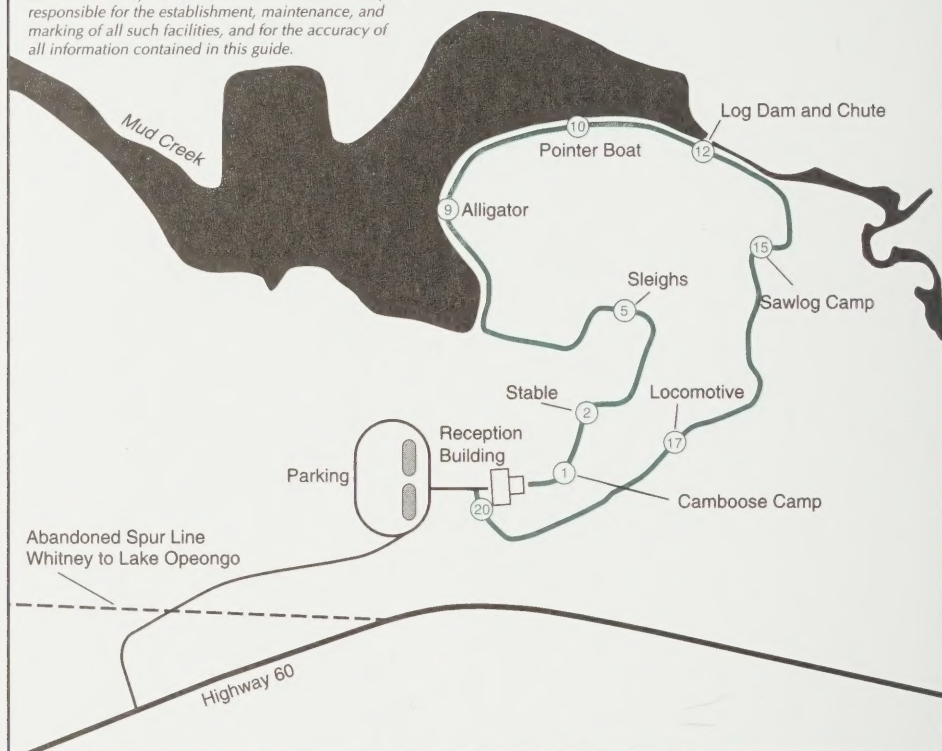
Text by Dan Strickland



Printed on  
recycled paper

Drawings by Christine Kerrigan

Although this trail guide is printed by The Friends of Algonquin Park all information on the trail is obtained from the Ministry of Natural Resources. The Ministry is responsible for the establishment, maintenance, and marking of all such facilities, and for the accuracy of all information contained in this guide.



Your visit to the Algonquin Logging Museum begins at a staffed Visitor Reception Building housing a bookstore and a theatre where an audiovisual program presents an overview of logging in Algonquin Park.

The actual exhibits, however, are located along an easy 1.3 km ( $\frac{3}{4}$  mile) loop trail that begins and ends at the Visitor Reception Building. The numbered sections of this guidebook correspond to the numbered exhibit stations along the trail and will introduce

you, through the exhibits, to the story of Algonquin Park logging from the early square timber days in the 1830s right up to today's modern forest management.

If you wish to keep the guidebook for future reference or as a souvenir of your visit please pay by putting the money in the receptacle provided. Or, you may use the guidebook free, and put it in the box provided at the end of the trail.

Have an enjoyable and informative visit!

*The Algonquin Logging Museum was a cooperative development of the Ontario Ministry of Natural Resources, The Friends of Algonquin Park, and the Algonquin Forestry Authority. Special thanks are due to Ron Tozer, Tom Linklater, Ray Townsend, Bill Brown, and Rory MacKay whose knowledge and support made the museum possible.*

*Algonquin Logging Museum: Logging History in Algonquin Provincial Park originally printed in 1993, reprinted 1994, revised and reprinted 1996.*



## Station 1 — Your Home for the Winter

If you had been a struggling Ontario or Quebec farmer back in the 1800s, your land might have produced enough to feed and clothe your family but you would have been hard-pressed to earn the cash needed to buy other necessities.

One of the very few possibilities for extra income was to spend the winter in a logging camp and, at one time, over half the able-bodied men in Canada did just that. In the fall, after you had got in your crops, you would have put a few belongings in a cloth bag, said goodbye to your wife and children, and started the long walk of days or weeks to reach your home and job for the winter.

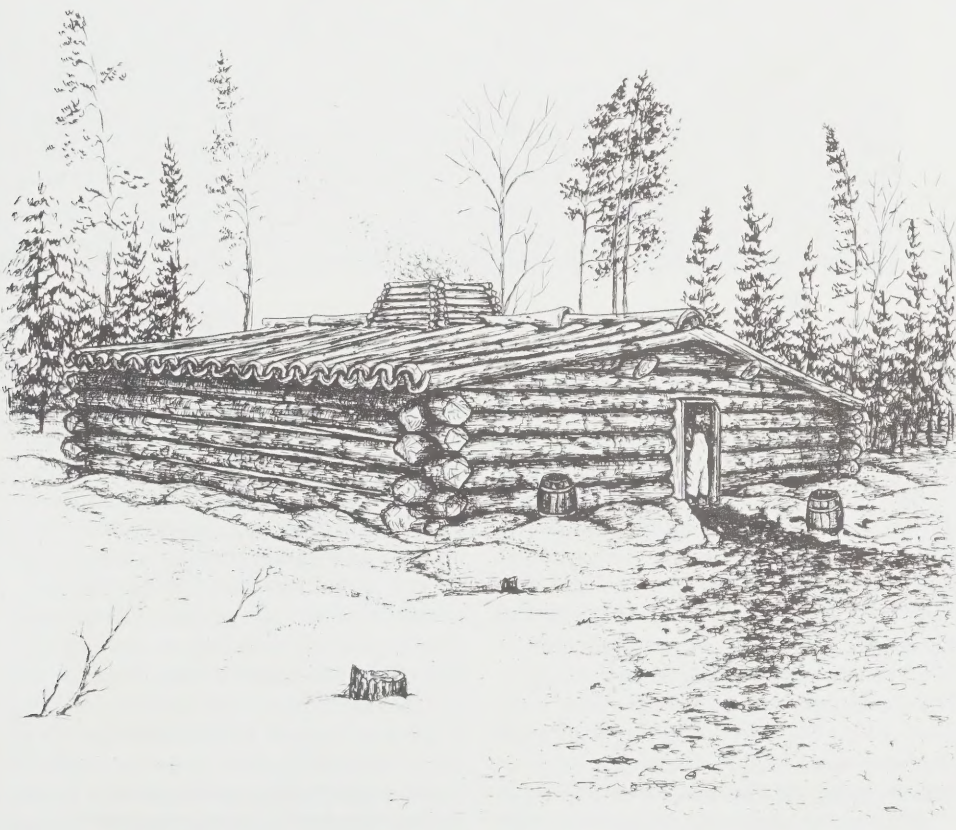
Before you is a reconstruction of the earliest style of camp known as a "camboose shanty".\* The massive pine

log walls are an obvious feature but also be sure to walk around the sides of the building to see the ingenious use of hollowed-out cedar "scoops" to make a simple but strong and water-proof roof.

Inside, you will see a rough floor made of flattened poles and enough "muzzle-loading" bunks to sleep 52 men (with two in each individual bed). There

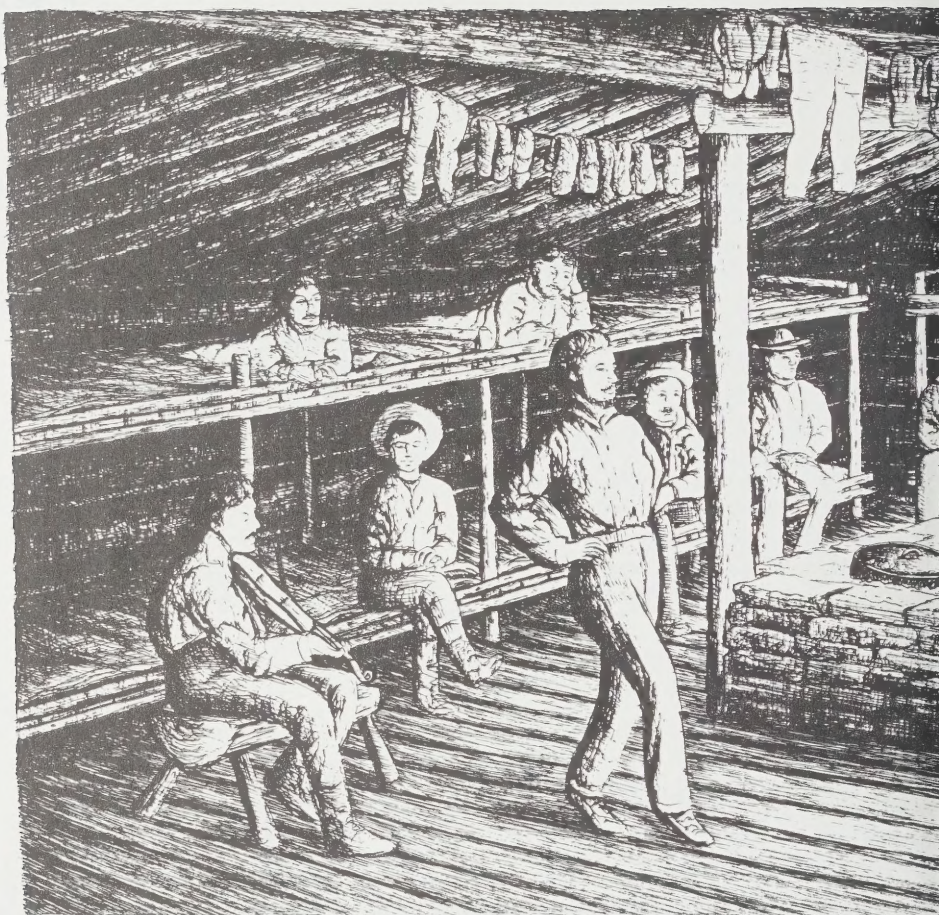
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\*The word "camboose" is a corruption of an old French word, *cambose*, originally meaning a ship's storehouse for food and wine. "Shanty" comes from another French word, *chantier*, meaning "work area". In its English version, the word was used to refer to this style of logging camp and sometimes to the central fireplace in particular.



The cook at the door of his camboose camp.





were straw mattresses and a couple of blankets per bed, but the men had to use their coats for pillows. They invariably slept in the same clothes they worked in, seldom changing them until they wore out.

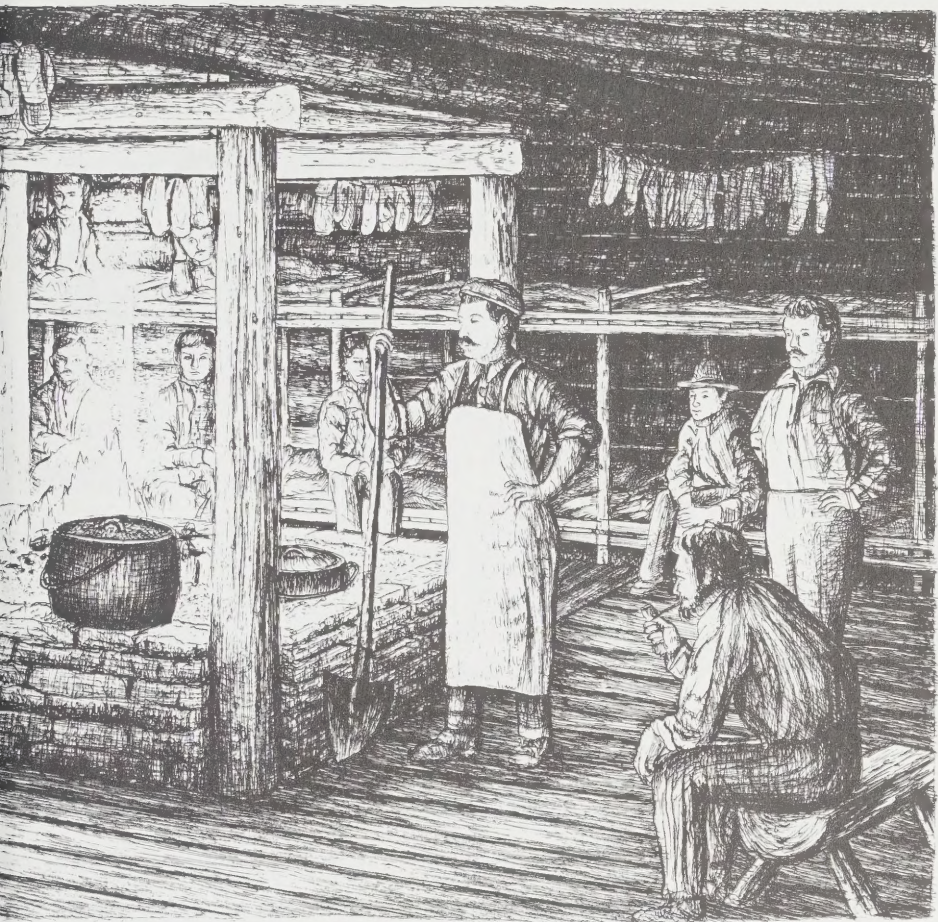
Few men ever washed more than their hands and face and, although serious illnesses were unusual, lice and bedbugs were often a problem. The only "furniture", apart from simple benches at the end of the bunks, were a big bread box holding up to a hundred pounds of flour, and another box called a "van" from which the men could buy tobacco, matches, and clothes—on credit, of course, against their winter's pay.

There were usually no windows at all in a camboose shanty but you have to remember that the men got up long

before sunrise—usually about 5 in the morning. That allowed them to put their boots on, have breakfast (beans, salt pork, bread, and tea) and walk to the cutting area, as far as three miles away, all in time so they could arrive at the moment there was enough light to work by. Of course, they stayed out until nightfall and walked back to camp in the dark so again there was no real need for windows when they got back for supper (also beans, salt pork, bread, and tea) and afterwards, crawled into "bed".

You may find it a little dark and gloomy inside but shanties were reasonably warm and well lit when men actually lived in them. A chore-boy always kept a fire burning in the sand-and-stone central hearth below the wooden chimney of Black Spruce poles. The cook used the





same fireplace to bake bread and beans, suspending the pots for tea over the fire, or baking beans and bread in big iron "dutch ovens" buried in the hot sand and coals.

Sometimes a little sand or ashes would get spilled into the beans but a good cook always claimed this saved pepper and improved digestion...

With most of the heat going up the large central chimney (and even most of the smoke) a camboose shanty like this one required enormous amounts of wood to heat in the winter. About all that could be said for them is that they were well ventilated—the enormous updraft always drawing fresh, cold air from the outside through the moss and mud chinking between the logs. This was probably just as well, considering that

the camp contained 52 filthy, unwashed, snoring bodies sleeping in filthy unwashed clothes—not to mention all the half rotten socks and boots drying out overnight around the fire...

We wonder how many of us could live in such a hovel for even a day, let alone from October to March with no radio, no TV, no possibility of speaking to our far-off families on the (uninvented) telephone or even seeing them at Christmas. And yet, by all accounts, most of the men not only accepted life in the old camboose camps but actually enjoyed it...

You almost have to pinch yourself to realize how much times and perceptions have changed in just three or four generations.



## Station 2 — And How Are You This Morning, My Fine Beauties!



**A teamster leading his horse out of the stable.**

God knows, the shantymen worked unbelievably hard but none of them were strong enough to load logs onto a sleigh, let alone actually haul the sleigh or do any of a dozen other impossibly demanding jobs associated with a logging operation. The men needed animals—oxen at first, and then horses—to provide the brute power required. Indeed, although many logging practices changed over the years, horses continued to be essential right up until the 1950s. At the beginning of that decade there were still some 35,000 horses being used for logging in eastern Canada—although they were almost all gone by 1960, displaced at last by the arrival of mechanization.

Before you is a reconstructed stable from the early camboose shanty days. Like the shanties themselves, this building had simple log walls, and a cedar

scoop roof. It also has a rough wooden floor made of flattened wooden poles although many stables—and shanties as well—made do with only bare earth.

Step through the wide door on its simple wooden-pin hinges and you will see the mangers at the end of each stall. These held the 10 kg (25 pounds) of hay required each day by each horse. The smaller boxes contained the daily ration 11 litres (3 gallons) of oats similarly needed by each animal. This stable would have accommodated eight horses, that is four teams of two, one team in each stall. Notice that there is no moss or mud chinking between the logs. Even on cold winter nights, the stable had to have enough ventilation to carry heat away from the perspiring animals. The small door at the other end of the stable was used for shovelling out the you-know-what.



The horses used for logging were big Clydesdales, Percherons, or Belgians, each weighing as much as 750 kg (1700 pounds). A team of two might have to haul 20 ton loads as far as 30 km (20 miles) in a day and they needed to be well treated and cared for. Usually the teamster who worked with them was their owner. He brought them to the camp from his farm in the fall and took

them back home in the spring. Teamster and team had to trust and understand each other perfectly. Great strength was one thing expected of the horses but so were great delicacy and the ability to respond to subtle signals. There are still men alive today who worked with horses in the bush and know what a marvellous thing it was to see man and horse working together so well.

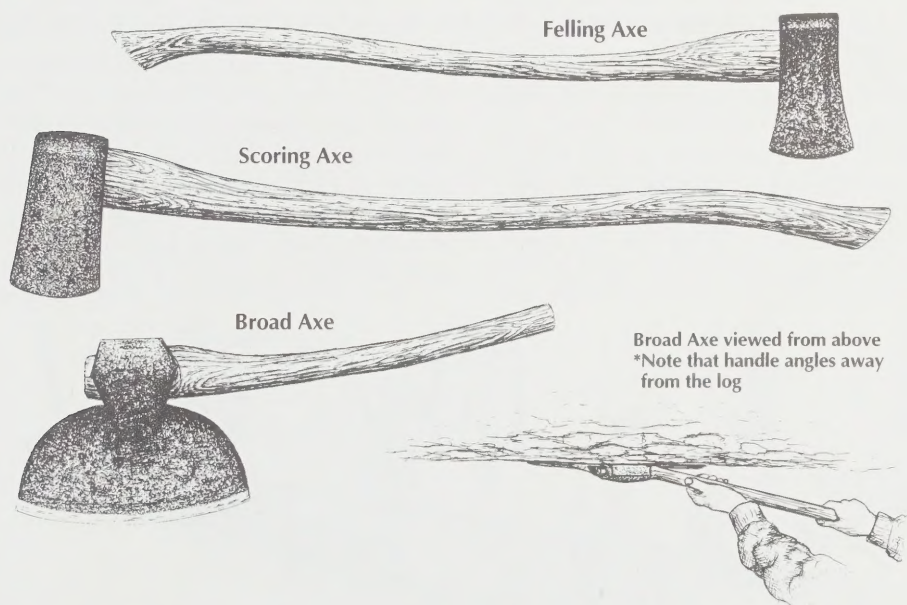
## Station 3 — The Skill (and the Waste) of it all

Logging in eastern Canada has had two major eras. Today, we are in the second, or “saw log” era which began in the mid-to-late 1800s. It is so named because it involves the transport of round logs (tree trunks) from the bush to sawmills where the logs are sawn into lumber.

Before that, however, was the “square timber era” in which very large White Pine and Red Pine were felled and made

felled, and the upper 60-80 feet of the tree has been discarded. That part would be useless for squaring because, having branches, it would show knots at the surface and the timber buyers of the day wouldn't even consider it. Only the part of the tree below the first branch, the 42 foot length you see here, was suitable for being made into a stick of square timber.

The freshly felled tree would have still had its bark but a man would have



into square “sticks” by skilled men using nothing but axes.

The two logs to your right and the two at the next clearing just down the trail show four stages in the squaring process.

In Log No. 1 the great tree has been

“rossed”, or removed, the bark in two lines, a few inches wide, all along the trunk halfway between the top and the sides of the horizontal log. He then “lined” the log by snapping a taut, chalk-impregnated string against the exposed



wood in order to mark the depth to which the log would be squared on the two sides.

The next step would be accomplished by a couple of men standing on top of the log with special, long-handled "scoring" axes. They would cut notches into each side of the log close to the depths indicated by the chalk lines. This is the stage at which you see Log No. 1.

pound) broad axes. It required great skill and years of practice to be able to shave off the remaining wood in such a way that the final surface was not only perfectly vertical but also as "smooth as a table top". This is the stage at which you see Log No. 2.

After that the log would be turned 90 degrees, lined and scored on the remaining two sides (see Log No. 3), and



**Scoring the log in as far as a chalk line on a debarked stipe the length of the log.**

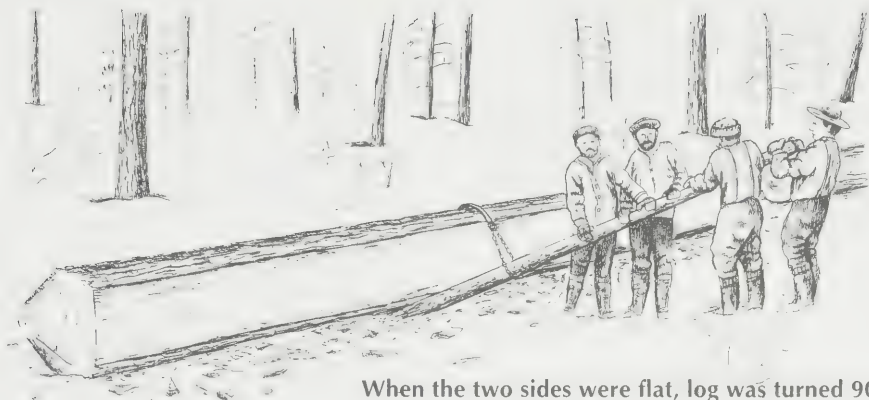
To proceed further, the scorers split off big blocks of wood between the notches and then made more closely-spaced vertical cuts to leave two, roughly flat, vertical surfaces on each side of the log. Two hewers then stepped in and finished the job by "hewing to the line" on each side of the log with their 5.5 kg (12

then hewn flat as before to produce the final, fully squared log (see Log No. 4). In retrospect the squaring process must be seen as extraordinarily wasteful. A quarter or more of the main tree trunk's beautiful wood was left lying in the bush as useless chips—not to mention all the other wood in the upper, branched part



**Wood between notches was removed crudely, then surface finished off with broad axes (men at left).**





**When the two sides were flat, log was turned 90°.**

of the tree that wasn't even considered for squaring in the first place. Even worse, the discarded wood often ended up being fuel for particularly devastating forest fires. These probably did far more damage to the primeval forests than the removal of the rather scarce individual trees (perhaps less than 5% of all White and Red pines) that were big enough to be selected for squaring.

So, why did people go to all the trouble of squaring the great logs and why did the square timber era last from the early 1800s right up to 1900? There were apparently several reasons. To begin with, the squaring process allowed the detection of knots or other flaws that would make a stick of timber unacceptable. A second reason was that square timbers were much easier than round logs to assemble into the small

rafts called cribs and then even bigger rafts for the trip down the Ottawa and St. Lawrence rivers to Quebec City. At that point as well, square timbers were more desirable than round logs because they could be fitted more efficiently into the holds of the timber ships that took them across the Atlantic. And finally, once in England, square timbers were immediately ready to be sawn up into planks and boards.

Incredible as it seems today, back in the 1800s people thought our forests were inexhaustible. They carried this idea to such an extreme that they literally placed more value on space savings and convenience than they did on the enormous amounts of wood (and labour) that were wasted, year in and year out, hurling down the pine and converting the mighty logs from round to square.



**Wood removed from remaining round sides to produce finished square timber.**



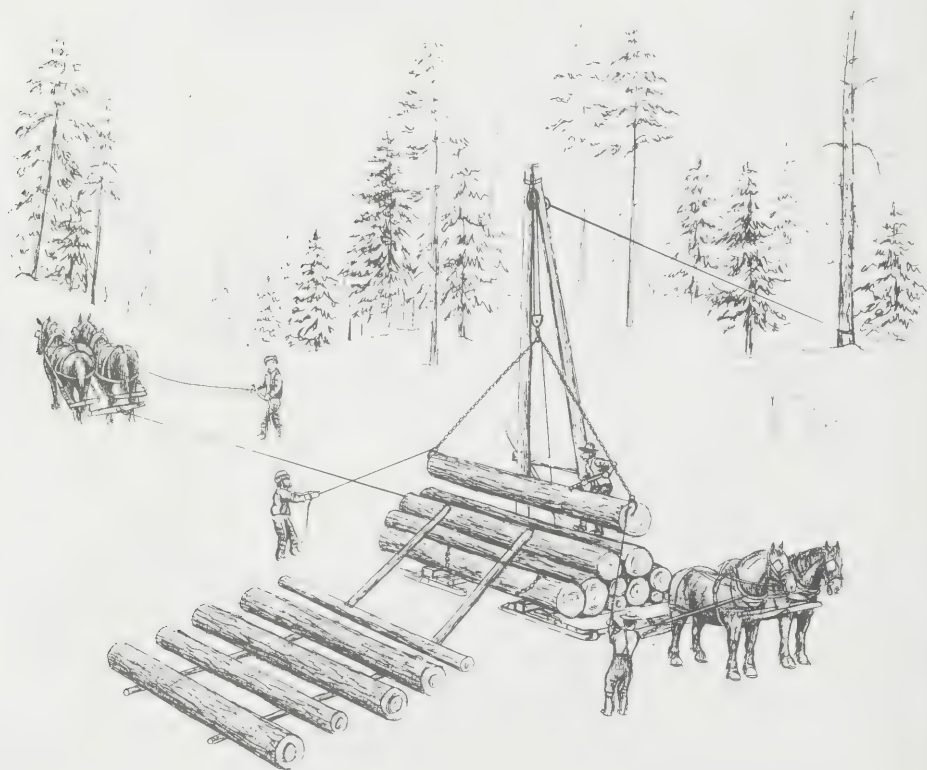
## Station 4 — Through Snowy Woods to Frozen Lakes

For almost all of Algonquin Park's logging history, right up until the advent of trucks in the 1940s, the basic approach to transporting logs from the bush to mills was to float them down swollen rivers in the spring runoff. Very few trees grew right at the water's edge, however, and ways had to be devised to somehow get the logs from where they were cut, down to suitable lakes and rivers. Skidding them through the bush to a central loading area or "landing" and then hauling them by horse-drawn sleigh over slippery roads sounds simple enough but there were serious complications that required some ingenious solutions.

One of the biggest problems was simply getting those heavy logs up onto a

sleigh! Here you see how it was typically done in the sawlog era, say in the 1920s or 30s. The tall wooden crane, called a "jammer", was powered by a team of horses pulling a cable that passed through a block and tackle arrangement at the top and ending in two iron "pig's feet". These were "jammed" into the ends of the log being drawn up onto the sleigh. A loading crew consisted of a teamster to command the horses, two "bull-ropers" to guide the log on its way up, and a "top-loader" to fit the log securely into place.

The sleigh itself consisted of two sturdy "bunks" that supported the load and two sets of runners. The backs of the front runners were connected to the



Horses at left power the jammer to lift log up onto the log sleigh.



fronts of the back runners by heavy chains that crossed in the middle. This arrangement permitted the heavily laden sleigh to turn corners smoothly and safely.

Fully loaded, the sleigh might weigh 15 or 20 tons, but it was pulled by just

one team of horses. The teamster himself sat up on top of the log load and bundled himself up for the long cold ride down to the frozen lake. There the logs would be unloaded on the ice, along with thousands of others, waiting for the spring thaw and the start of the river drive.

## Station 5 — Preparing the Way



Log sleighs couldn't just glide off through the forest. Their enormous bulk and weight made it essential to carefully lay out haul roads with no uphill sections at all and with downhill slopes that were as gentle as possible.

Even then the haul roads had to be tended carefully. When the snow began to fall in late autumn, a simple, horse-drawn "V-plow" was dragged along to clear off loose snow and compact the surface of the roadway. Later, when the

### Using a patent plow to clear a haul road.

snow got really deep, the men used a "patent plow" which had adjustable blades for carving out, and maintaining grooves in the packed road surface that would guide the runners of the log sleighs. The patent plow also had wooden "side-wings" that could push any new snow far enough off to the side that it would not catch the overhanging bunks and logs of the loaded sleighs.

Finally, the roads had to be kept as slippery as possible in order to ease the

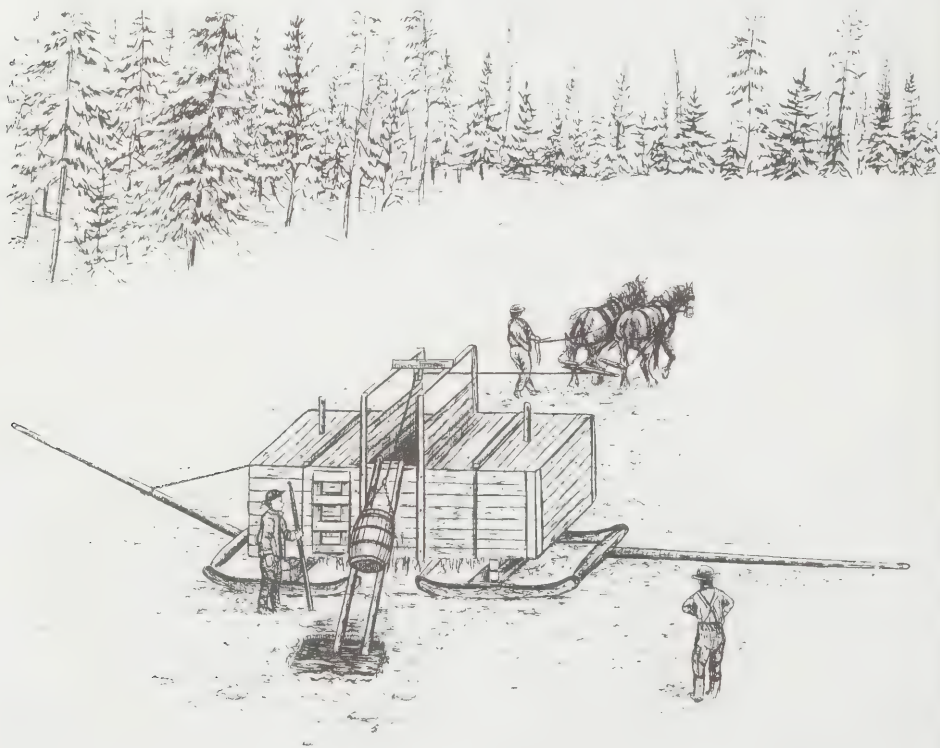


job of hauling these enormous 20 ton loads. The solution to that problem was to sprinkle water on sleigh runner tracks in the dead of night, when the water would freeze instantly, leaving a clear icy surface ready for the next day's hauling. The special water tanker sleighs that did the job were filled by using their team of horses to repeatedly pull a big wooden barrel full of water out of a hole in lake ice and up a runway of two slanted poles. At the top the barrel tipped over and poured its contents into the tanker sleigh before being let back down into the icy lake water for another barrelful. When the tanker was sufficiently full (100 barrels!), the men hitched up the horses, climbed up to the top of the tanker and headed out to the next section of haul road that needed icing. When they got there a couple of men at the back of the tanker started letting out the

water by pulling up the poles that plugged two holes at the bottom of the tanker. This let the water out onto widening metal troughs and, from there, the water fell directly down onto the runner grooves in the roadway.

Look under the sleigh and you will see these features. You may also notice that the runners of the water tanker, unlike those of a log sleigh, are curved up at each end. This meant that the tanker men didn't have to turn their sleigh around when they ran out of water and had to go back for more. Instead, they merely unhitched the horses, brought them around to the back end of the sleigh, hitched them up again and started back the way they had come.

This would have saved considerable time and labour but the tanker crew still had one of the coldest jobs one could possibly imagine.



Filling up a tanker sleigh from a hole in the ice.



## Station 6 — Hanging on for Dear Life!



**Hot sand was thrown onto downhill stretches to slow the sleighs down.**

Try as they might, lumbermen in the horse-logging days were not always able to avoid steep downhill slopes. These could be very dangerous because a loaded sleigh that started to gather speed would overtake and kill the horses in seconds—not to mention what would happen to the teamster and the log load itself.

The standard technique for avoiding such calamities was to have (generally young) men called “sandpipers” stationed at intervals along a troublesome downhill slope, each with a shovel and a supply of hot sand. Their job was to size up the speed of each oncoming sleigh and to throw snow on the roadway

if the sleigh was moving too slowly or sand if it was going too fast. The job was trickier than it sounds because no two teams were alike and a good “sand hill man” had to take into account whether a given team preferred to come down fast or slow. If he overdid the sand he could get the sleigh stuck, even going downhill and if he overdid the snow he could cause a disaster.

A lot of this dangerous uncertainty was removed by the invention of the Barrienger Brake which you see here. Anchored by cable to a tree at the top of a hill, the brake had a series of lever-operated wheels and pulleys that controlled another cable attached to



each sleigh for its trip down the hill. One man worked the levers and could literally stop the sleigh anywhere he wanted. There can be no doubt that the odd-looking Barrienger Brake saved many lives and it came to be affectionately

referred to by loggers as the "crazy wheel". Some men were so fascinated by its inner workings that they whittled little models of crazy wheels in the evening—and then "went crazy" trying to thread them with string!



**With a Barrienger brake one man could safely control the descent of a fully loaded log sleigh.**

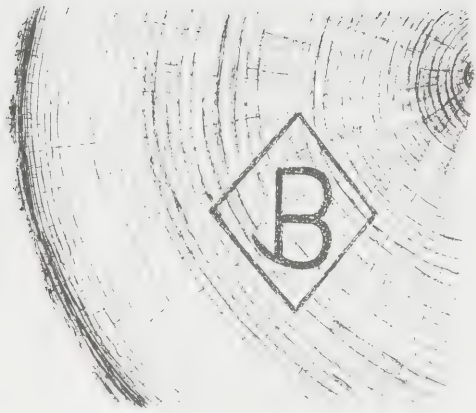
## Station 7 — Big Business!

When the sleighs reached their destination the men piled the logs either directly on the ice, if they had hauled to a lake, or on the bank if the log dump was on a river. Either way the idea was to wait until the ice melted in the spring and then "drive" the logs downstream to the Ottawa River for transshipment to England in the case of square timber, or to be sawn up in mills downstream in the case of round saw logs.

By the time the winter's cut was over, the men in a camp like the one you saw back at the beginning of the trail would have built up a stockpile of perhaps 600 to 1000 huge square timbers. Or, in the

sawlog era, the total accumulation might have reached 2-3000 smaller round logs. Either way, every one of the logs would have been marked to identify it as the property of a particular company. Square timbers were scribed with a "mark" on the side, and the round sawlogs had a symbol stamped into their ends with a special stamping hammer. Marking was an important consideration because, as the drive progressed, the logs cut on one limit might very well get confused with those cut by another company on a different upstream tributary of the same river. Few people today can imagine just how many companies and men spent the

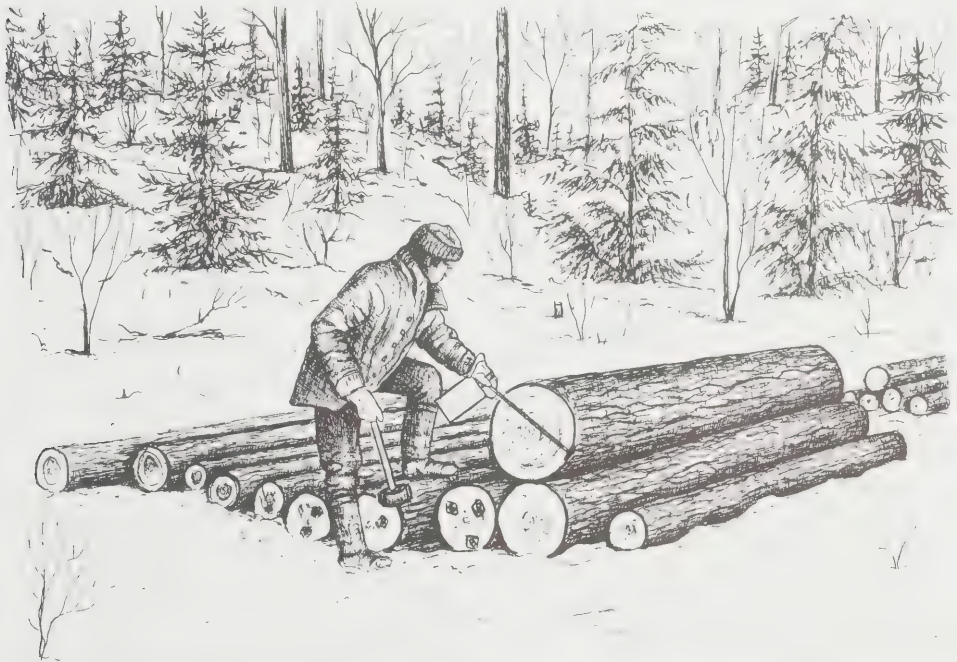




winter a century and a half ago in the wilderness of what is now Algonquin Park and how much timber they felled and floated down to the Ottawa River each spring.

In the winter of 1866-67, for example, the year of Canada's confederation and twenty-six years before Algonquin was established, some 30,000 pieces of square timber were cut in what is now

the Park. In 1879, just twelve winters later, and still 14 years before Algonquin became a Park, almost all of the present Park area was under licence and over 73,000 sawlogs and 15,000 pieces of square timber were driven down such familiar Algonquin rivers as the Petawawa, the Bonnechère, and the Madawaska.



This man measured each log and used a special stamping hammer to leave his company's distinctive mark.

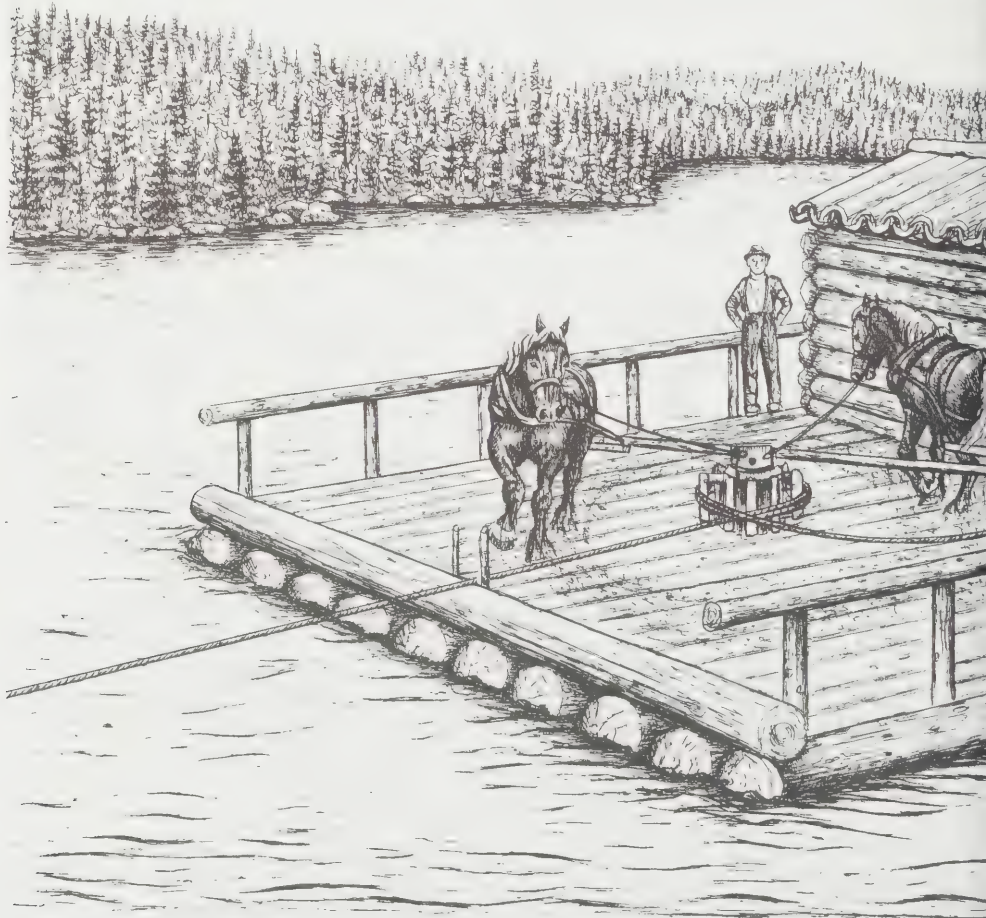
## Station 8 — Around and Around...Very Slowly

The idea of a log drive seems straightforward but, in fact, there were two major problems. One was that most river systems in Algonquin Park and elsewhere on the rocky Canadian Shield actually consist of relatively short stretches of river between many, often quite sizable lakes. The difficulty was that there is no current in such lakes (except right at the inlets and outlets) and that, left to their own devices, floating logs might stay in a lake for years or even "forever". A way had to be found to literally pull the logs across lakes to keep them on their desired downstream voyage.

The first solution was the "cadge crib", a massive raft measuring 9 by 12 m

(30 x 40 feet) like the one you see here—or perhaps even larger. In the centre of the crib was a big wooden spool or capstan. Powered by a team of horses, the capstan wound in a heavy, 5 cm (2 inch) rope ultimately attached to an anchor or a log boom, depending on just how the cadge crib was being used.

Sometimes the cadge crib would be laboriously rowed up ahead of the log boom until it got to the end of the rope attaching the crib and the boom. Then, after the crib was anchored near land or snubbed to a tree on shore, the horses would start their pull, going slowly round and round until all the rope had been reeled in and the boom had been pulled



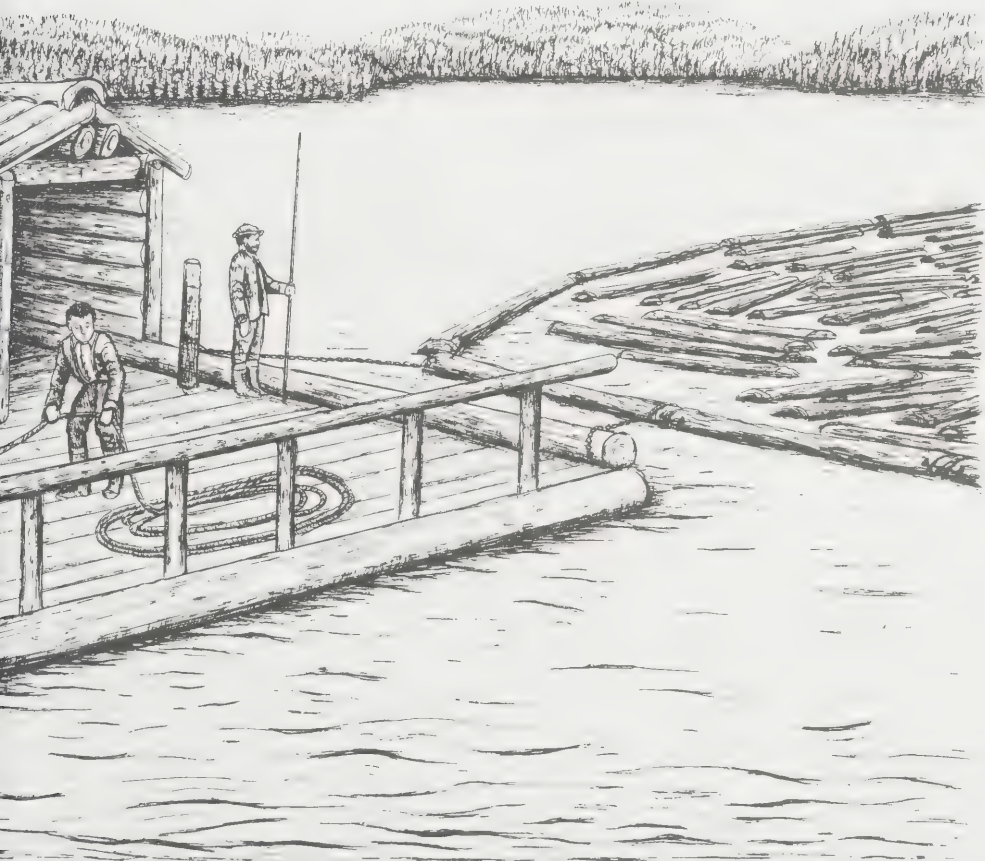


up to the crib's position and the whole process started all over again.

The other way cadge cribs were used was called "warping". That technique involved attaching the cadge crib directly to the log boom and then rowing a boat, carrying an anchor and the coiled haul rope from the crib, down the lake as far as it would go. When all the rope was uncoiled the anchor would be pulled off the boat, sink to the bottom of the lake and, if the men were reasonably lucky, it would hold its position there. Once again the horses would begin their work, this time slowly winding both the log boom and the attached crib up to the anchor point. As powerful as the horses were, their efforts could be overcome by

even a gentle contrary wind and for that reason much of the warping was done at night. Conditions were often brutally cold and, at the end of each pull, the bare-handed men had to haul up the heavy, wet rope and anchor (which itself might weigh from 150 to 450 pounds) before starting all over again.

The most that could be hoped for was a slow and hard-won two miles an hour—and even then only when conditions were favourable. Many a lonely cadge crib man must have divided his thoughts between longing to be on shore beside a warm fire and wondering if there couldn't be a better way to get logs across a lake...



The horse-powered cadge crib was the first method used to move log booms across lakes.

## Station 9 — The Better Way!

Before you is the *William M.*, one of only three reasonably well preserved examples of the “alligator” that survive in the world today.

It is hard to imagine the impact this powerful amphibious tugboat must have had when it was invented back in 1889 by John Ceburn West. For the generations of loggers who had known nothing but the slow, exhausting, horsepowered cadge crib as a way to move logs across remote lakes, Mr. West’s creation would have been a stunning breakthrough.

The new machine was a steam-powered tug and winch combined into

boiler, fed with three quarters of a cord of wood, built up enough steam to warp booms of up to 60,000 logs for as long as ten hours.

Most impressive of all, however, was the alligator’s ability to winch itself overland from one lake to another. The hull was scow-shaped to give out-of-the-water stability, and two steel-plated runners (often greased to reduce friction) permitted the alligator to pull itself over logs placed crossways at 6 or 8 foot (2 m) intervals along the portage. Progress was slow (a mile, or 1½ km, a day was tops) but the winch was so powerful that



one versatile unit. For ordinary travel, the 20 horsepower engine drove the paddle-wheels on each side and the boat would chug along at 5 or 6 miles per hour. To move a log boom, the crew would disengage the engine from the paddle-wheels and use it instead to power a winch holding a mile of five-eighths inch steel cable. In essentially the same process as used by the cadge crib, the alligator would winch in the cable and thereby pull or “warp” itself and the attached log boom up to a previously established anchorage. The alligator’s

it could pull the alligator up 20 degree inclines. In such cases the fireman would use a special adjusting screw to keep the boiler level.

The Simcoe, Ontario firm of West & Peachey, Ltd. prospered in meeting the demand for the marvellous new machine. They could turn out a complete alligator in just three weeks and, between 1889 and 1934, they built over 200 for customers across Canada, in the U.S., and even as far away as South America. Company advertisements proudly extolled the virtues of the alligator,



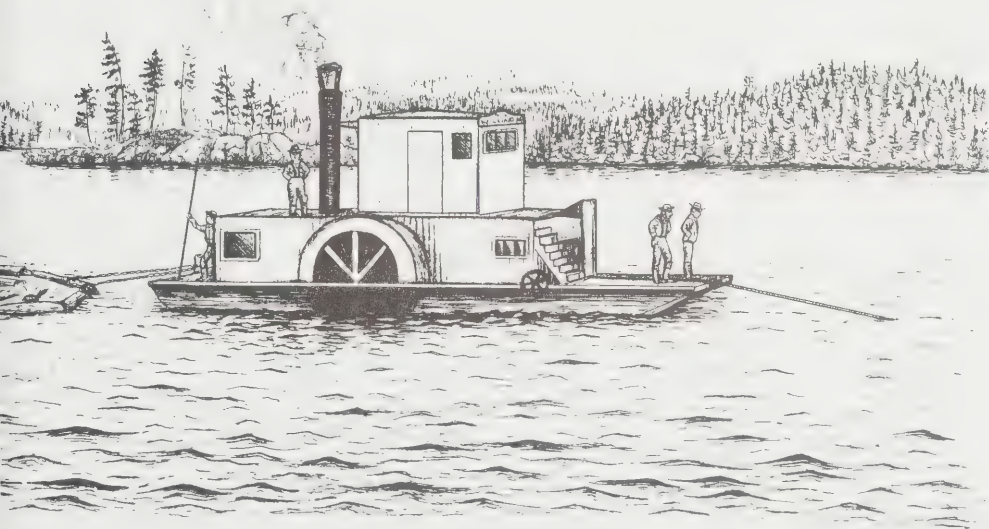
saying that they would “do away entirely with the almost endless annoyances to which lumbermen of late years have been subject”.

The crews who actually had to work in the noise, smell, and cramped quarters of alligators might have seen things differently, but in those days it probably never even occurred to them to complain.

Most of the people who actually worked on alligators in the Park have now passed on but a few of their memories were recorded for posterity. Mr. Henry Taylor of Bancroft, for example, worked in the Rock Lake area on an alligator acquired by the McRae Lumber Company in 1928. He recalled the

Penetanguishene. First used north of the French River, it was later sold to another company, perhaps as early as 1913, and sent back to Simcoe in 1921 to be rebuilt. On that occasion it was renamed the *William M.* and renumbered No. 171. By 1935 the *William M.* had come into the possession of its final owner, Gillies Bros. of Braeside, Ontario (near Arnprior) and was being used on their limits here in Algonquin. It steamed around Cedar Lake on the Park's north side in the 1930s and 40s but in 1946 hauled itself out of the water for the last time.

Originally put on display in 1960, the *William M.* has now had all its wooden parts completely replaced on two



amazement of Park visitors who encountered the great huffing beast one day on the portage between Rock and Pen lakes! That particular alligator was probably last used in the 1930s and today its remains stand on the shore of Galeairy Lake, three miles south of here, opposite the village of Whitney, just outside the Park.

The alligator here at the Algonquin Logging Museum was originally called the *Max*. It was a “standard-size” alligator built in 1905 and sold for \$2875 to the Beck Manufacturing Company of

occasions (1971 and 1990) but all the dimensions and metal parts are genuine. It will never again belch out smoke and sparks while struggling across an Algonquin lake with a log boom but it will do something far more important. For generations to come it will be a tangible link with a colourful and already vanished past and a demonstration of human ingenuity when faced with an enormous problem far off in the wilderness.

## Station 10 — Workhorse of the River Drive



### The pointer was the indispensable watercraft of river drives in the Ottawa Valley.

The cadge crib and the alligator were used to do the really heavy work on a log drive. There were nevertheless plenty of other tasks that required smaller, but still tough watercraft. Heavy anchors had to be rowed out from cadge cribs and dropped before each laborious “pull” of the log boom could begin. After the drive had passed through an area, shorelines had to be “swept” in search of stranded logs and these had to be pried loose and refloated lest they be permanently lost. Worst of all, log jams often developed in narrow, rocky sections of river and the men had to somehow get out to them, often through dangerous whitewater to pick apart the jams and get things moving again.

All these jobs called for a boat that was rugged enough to withstand incredible pounding but maneuverable enough and with a shallow enough draught that it could get to, and work in, some very tight places. No completely satisfactory design was found until the 1850s when J.R. Booth, Algonquin’s most

famous lumber baron, heard of the outstanding boat-building skills of John Cockburn, a recent English immigrant to the Ottawa Valley. Booth persuaded Cockburn to design a boat that met the needs of log driving and that is how the now famous pointer was born.

Cockburn’s design was an instant success and soon he was turning out some 200 boats a year from his shop in what is now downtown Pembroke (situated on the Ottawa River just east of Algonquin). The boats ranged from less than 20 feet (6 m) long to as much as 50 feet (15 m). Built of heavy pine lumber to withstand the battering they got on the rivers, large pointers weighed more than half a ton but drew only a few inches of water and could be pivoted by just one tug of an oar. The upswept bow and stern enabled men to perch over the water and work on hung-up logs below them.

Pointers were still being made in Pembroke as late as the 1960s by the grandson of their original builder. For over a century they graced the Ottawa



River and far up its tributaries, making life a little easier for the rivermen. They are now gone from the scene but they were immortalized in one of Tom

Thomson's most beautiful canvases, *Batteaux*, painted on Grand Lake on the east side of Algonquin Park in 1916.

## Station 11 — Tools of the River Driver

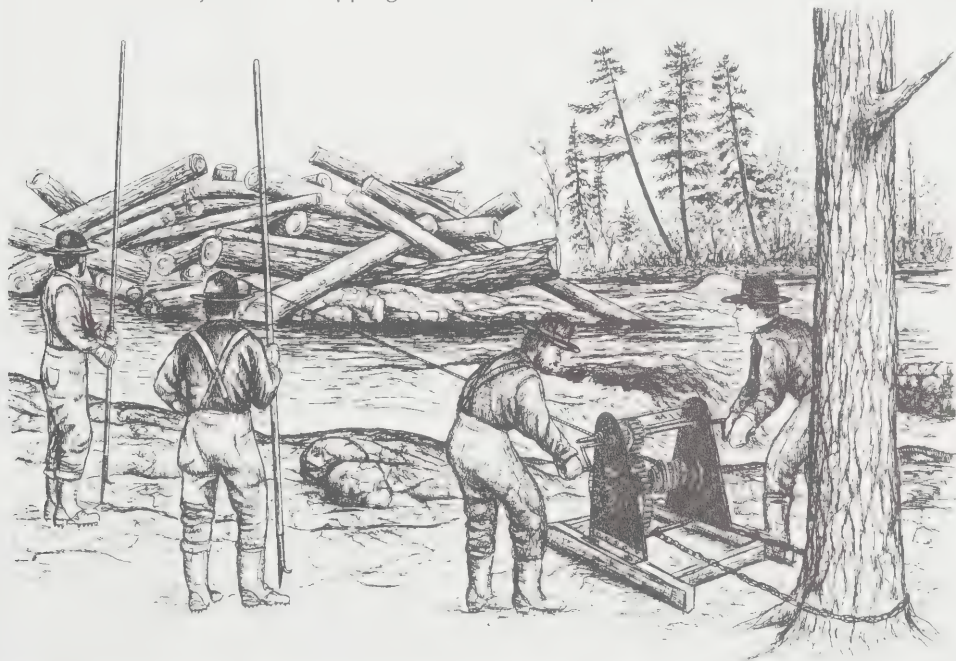
Persuading big heavy logs to go where they were supposed to was made much easier by certain simple but clever tools. Long pike poles were fitted with a sharp point for pushing logs and a curved hook for grabbing and pulling them, even from a distance.

The peavey, a variation of the canthook invented in 1858, had both a sharp point at the end and a movable hook on the side that could be used to bite into the side of a log. Once he had a grip on a log the river man could use the leverage provided by the peavey's five foot handle to roll even enormous pine logs. Of course, to work out on floating logs he had to have a well developed sense of balance, a sure foot, and a good pair of calked boots. The calks (pronounced "corks") were sharp, quarter inch iron spikes that helped prevent the lumberjack from slipping as

he jumped from one log to the next. (They were also the cause of "logger's smallpox" — the wounds you got by being stomped on in a bar room brawl when you were letting off steam at the end of the drive.)

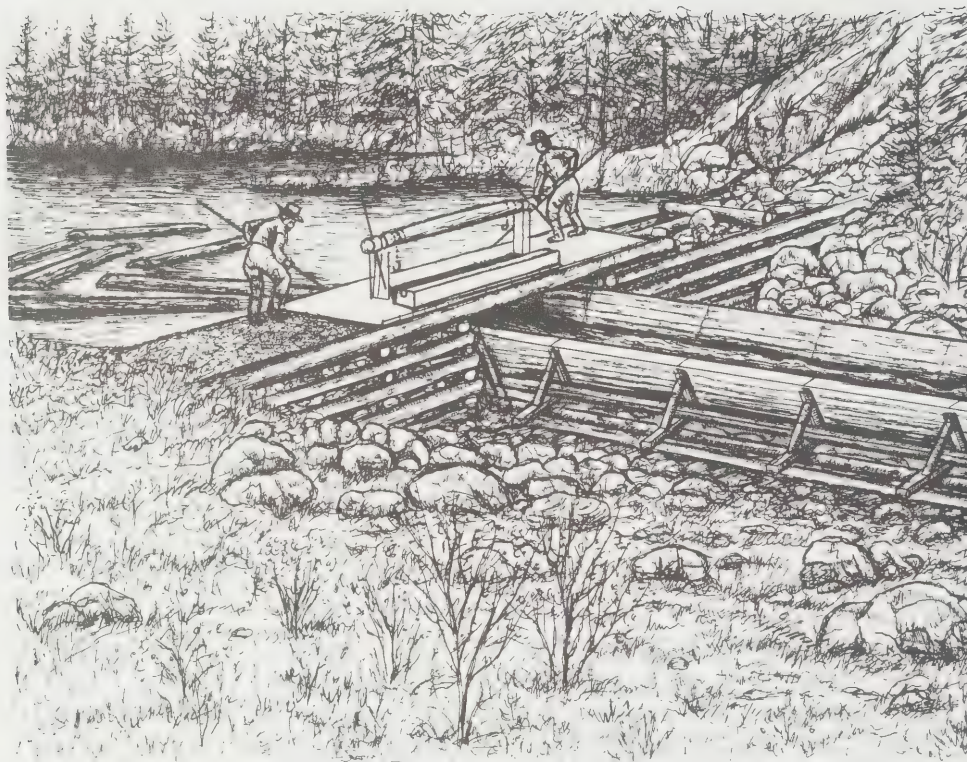
Another handy piece of equipment was the portable winch like the one you see at this station. Anchored to a tree on shore, it could be used for a variety of purposes. With the end of its cable attached to the key log or logs in a log jam, for example, and the men safely out of harm's way, the winch could then be used to pull the jam apart and start logs moving downstream again.

Or, in a lake or river with side bays, the winch could draw a log boom from an eddy back into the main river channel where the logs could then be released and fed into the current for the next step in their trip downstream.



Using a portable winch to pull out the "key log" in a log jam.

## Station 12 — Dam Impressive!



The basic idea of a river drive seems simple enough—just get the logs into the water and watch them glide downstream in the current! In fact, it was much more difficult than that. Much of the time, especially in the smaller rivers and creeks, there was simply not enough water to sustain a log drive. To be sure, the river drivers could usually count on raging torrents of floodwater in the spring runoff (and that was indeed when drives took place) but even then there were many waterfalls and rapids where logs were almost certain to get hung up and create terrible log jams.

The solution to both problems was to build combination dam and log chutes like the one you see here. Like its long-gone predecessor, used when logs were actually driven down this creek in the 1920s or 30s, this present day replica first of all created a wide and deep stretch of water upstream. This not only

helped float logs over obstacles in the flooded area and prolonged the time the creek could be driven, it also provided a second benefit. When enough logs had arrived at the dam, the dam-keeper could use the windlass to raise some of the dam's stop-logs and use the head of water to flush the timber, one log at a time, through the wooden chute, over and past the rocky stretch below the dam where the logs would otherwise jam up. This particular log chute is 60 feet (18 m) long but most were much longer. Chutes several hundred metres long were quite typical and in rare instances (not in Algonquin), they were as long as ten miles (16 km)!

Another kind of chute was used on the Ottawa River. In the square timber days, when individual timbers reached the Ottawa they were assembled into small rafts called cribs (about 7 m wide by 12 m long, or 25 x 40 feet) and these in





turn were assembled into mighty rafts containing 150 or more individual cribs. Such rafts were half-sailed, half-steered down the Ottawa to the St. Lawrence and then down to Quebec City. Unfortunately, there were several major falls on the Ottawa River, such as the Chaudière Falls at Ottawa itself, that were far too violent for the square timber rafts. At first there was nothing else to be done but to disassemble the rafts, send the timbers individually over the falls or through the rapids, hope for the best and then laboriously reassemble them into rafts—until the next major falls or rapids was reached. A way to eliminate much of the time consuming labour was at last found in 1829 with the construction of the first timber slide at the Chaudière. This was a chute so wide that it could take a whole 25 foot wide crib in a spectacular, hair-raising ride down past the falls to calm water below. This meant

that rafts no longer had to be broken down into individual logs (only into individual cribs) and that in turn meant far less time was used in taking the rafts apart and putting them back together again at the bottom of each falls.

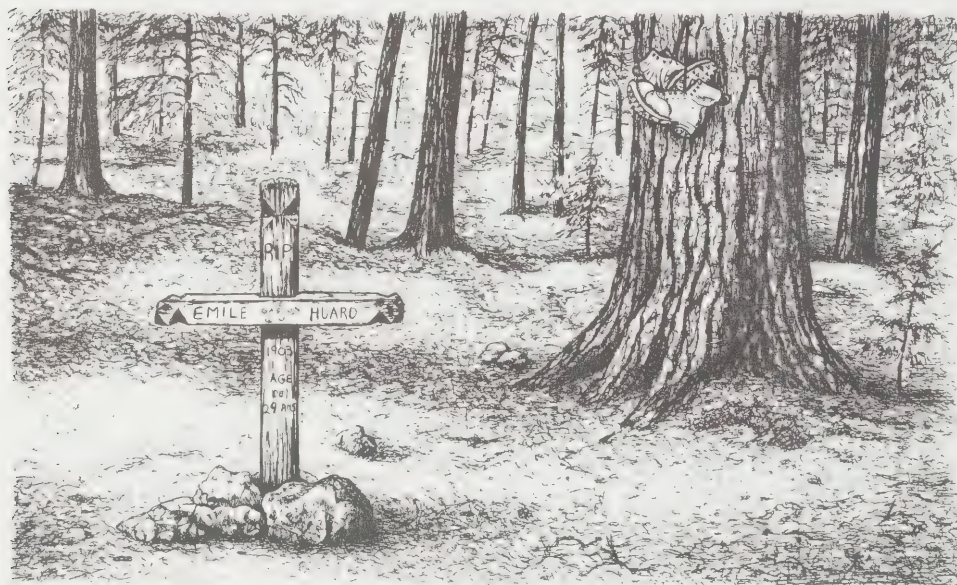
Algonquin Park never had any of the big timber “slides” but it certainly had its share of the smaller “chutes”. It was not at all unusual for even small streams like this to have a dozen or more and the Park as a whole may well have had as many as 1000 different chutes at one time or another. Unfortunately, most are completely gone now, with no surviving trace other than the (not uncommon) rock deflecting walls that the river drivers often built to help guide logs toward dams or away from trouble spots. Only this modern reconstruction, built in 1991, is still here to show us what was once a very common and impressive sight all throughout the Park.

## Station 13 — In Memoriam

Log dams and chutes may have eliminated the worst trouble spots in Algonquin streams and rivers, but not all of them. Log jams were always a fact of life on river drives and often a very dangerous one. It seems incredible that men would venture out onto quivering mountains of logs, sometimes backed up for miles upstream, to find and cut through the one or two "key logs" responsible for keeping back all the others. When a jam shuddered, groaned, and started to go, those brave souls headed back for shore, leaping from log to log, but far too often they didn't make

it. In the year of 1846 alone, 130 men died on 20 tributaries of the Ottawa including the Petawawa and the Bonnechère rivers here in Algonquin.

The men were buried where they died, their calked boots nailed to a nearby tree, and their graves marked by simple crosses that have now almost all disappeared. The cross you see here is a replica of one that stood for many years at Radiant Lake on the Petawawa River on the Park's north side. The lyrics below are from one of the songs commemorating the deaths of far too many brave young men.



*It was on a Sunday morning, as you will  
quickly hear,  
Our logs were piled up mountains high,  
we could not keep them clear,  
Our foreman said, "Turn out, brave  
boys, with hearts devoid of fear,  
We'll break the jam on Gerry's Rocks  
and to Bangor we will steer",  
Now some of them were willing and  
some of them were not,  
For to work on jams on Sunday, they  
did not think we ought,*

*But six of our Canadian boys did  
volunteer to go,  
And break the jam on Gerry's Rocks,  
with their foreman, Young Munro.  
They had not rolled off many logs when  
they heard his clear voice say,  
"I'll have you men be on your guard for  
the jam will soon give 'way"  
These words were hardly spoken, when  
the mass did break and go,  
And carried off those six brave youths,  
and their foreman, Jack Munro.*



## Station 14 — High Tech Tree Cutting!



**The crosscut saw was a major breakthrough when it was perfected in the 1870s.**

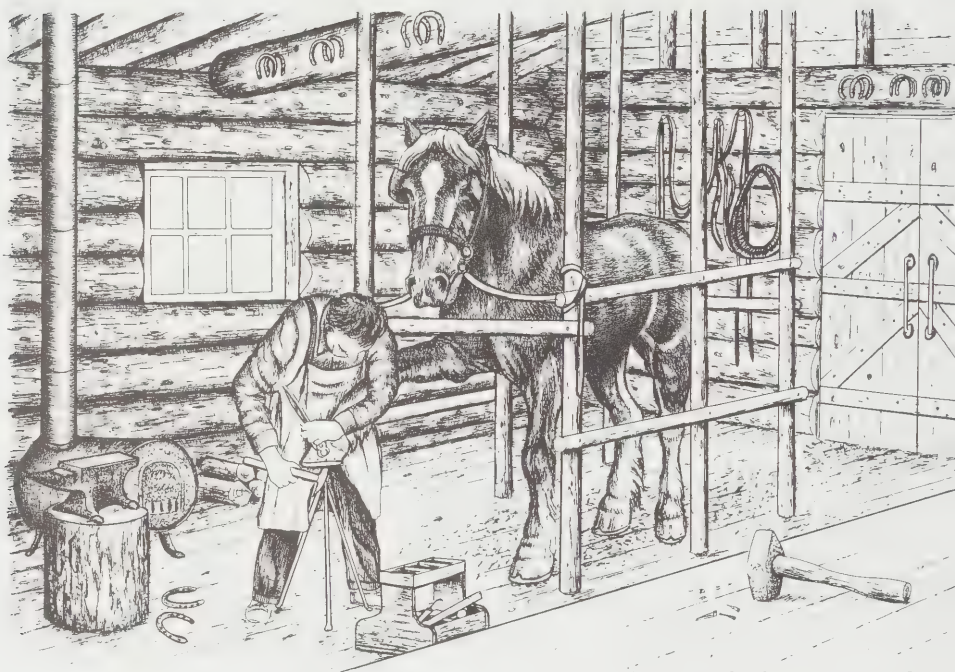
It seems incredible to think of a crosscut saw as a modern invention, but until the 1870s lumbermen had always used axes to fell trees. Saws had existed before then but they weren't much good because they always jammed in the tree after a cut had been started.

The problem was finally solved by putting special cleaning teeth called "rakers" between the cutting teeth to remove sawdust and shavings. With that simple improvement the crosscut saw almost immediately replaced the axe as the preferred tool for felling trees—for the simple reason that it was much faster. Two men on each end of a raker-tooth crosscut saw could produce 100 logs a day—twice the number that two axemen could do. Of course, saws had to be kept sharp and that was a lot trickier than with axes. As with so many technological innovations, the advent of the new saws

required a whole new set of skilled workers just to keep the new development working the way it was supposed to. In this case it was the saw filers, men who had good eyes and special hammers, files, and gauges for setting exactly the right lengths and relative angles on the teeth depending on the type of wood being cut, the sawing styles of the men, and even the temperature!

Of course the crosscut saw and the saw filer have themselves been overtaken by even newer developments—particularly chainsaws which came into use in the 1940s. These changes are just two among many that have occurred over the long history of logging in Algonquin. On the return trail, from here back to the Visitor Reception Building, we shall see examples of many other changes taking us right up to how logging is carried out in the Park today.

## Station 15 — We've Come a Long Way



**The blacksmith giving the horse a new shoe.**

The two buildings at this station are the blacksmith's shop and the cookery of a re-created Algonquin sawlog camp from the 1940s. When the re-creation is complete there will be a stable and a bunkhouse as well.

If you step inside the blacksmith's shop you will see several of the most important implements he used—including the forge, the anvil, a drill press, a post vise, and many hammers. In the centre of the shop is the horse "rack" or "stock" used for restraining a horse when it was being fitted with new shoes.

As with so many other aspects of logging in Algonquin, the blacksmith's operation has now been completely relegated to history. And yet, only 50 years ago, he and his shop were still indispensable parts of every camp. Not only did the blacksmith shoe horses, he also made canthooks, peaveys, pike poles, the metal parts of sleighs, and a host of other standard metal fixtures and objects ranging all the way from stoves to chains.

The words of one Algonquin blacksmith, Tony Shushack, help us to imagine what the hard, demanding work must have been like...

"I worked seven days a week from six in the morning sometimes to nearly midnight. I worked 57 years and I was never fired off a job. My family was Polish and I worked on their farm at Wilno near Barry's Bay and went to school only about a year. I was working as a handyman for Jack McRae\* in Algonquin Park when he said, "I want you to go and be a blacksmith!".

"Horseshoes came in barrels, ready-made, with eight nail holes in the sides but you shaped each shoe in the forge and anvil because horses are like people,

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\*Founder of the McRae Lumber Company of Whitney. The company still operates in Algonquin Park today and contributed the time and expertise of its older employees in helping to rebuild this camp as authentically as possible.



their feet are different sizes. If you put the wrong shoe on, it would bother his feet. You had to weld the calks on, blunt for skidding in autumn and sharp for the ice roads. When you picked up a foot to put the shoe on you'd trim the hoof and rasp it off and if it was an inch too narrow for the shoe you'd shape the shoe to fit..."

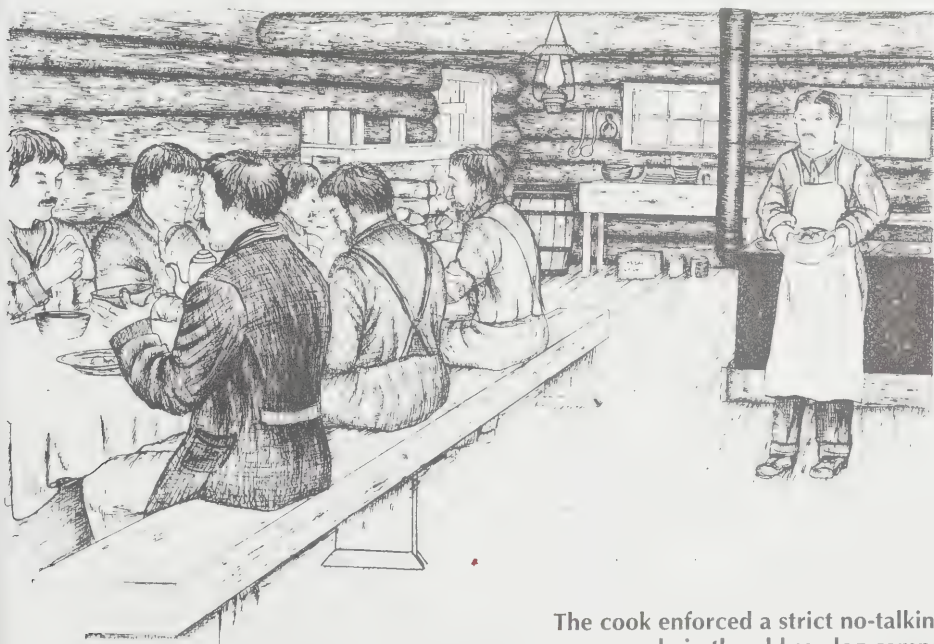
We would like now to invite you to step inside the other building at this camp—the cookery. There you will see surroundings which, though they may seem simple and rustic by today's standards, are absolutely luxurious in comparison to those of Algonquin's first logging camps. You may recall that the camboose camp at the beginning of the trail had no windows, chairs, or tables and that all the heat for warmth and cooking came from the central fireplace and the drafty open wooden chimney above. By contrast, this camp not only has furniture, it actually has a stove! On top of that, it has a simple, metal-lined washbasin for doing dishes and it even has a skylight (as much for letting excess heat out, however, as for letting light in). Another major advance over the camboose camp was the mere fact that

the men now slept in a separate bunk-house rather than having to eat and sleep all winter long with 50 other men always in the same room.

Sawlog camps also served a much greater variety of food, including bread, corned beef, white beans, vegetables, tea, sugar, prunes and raisins, butter, and jam.

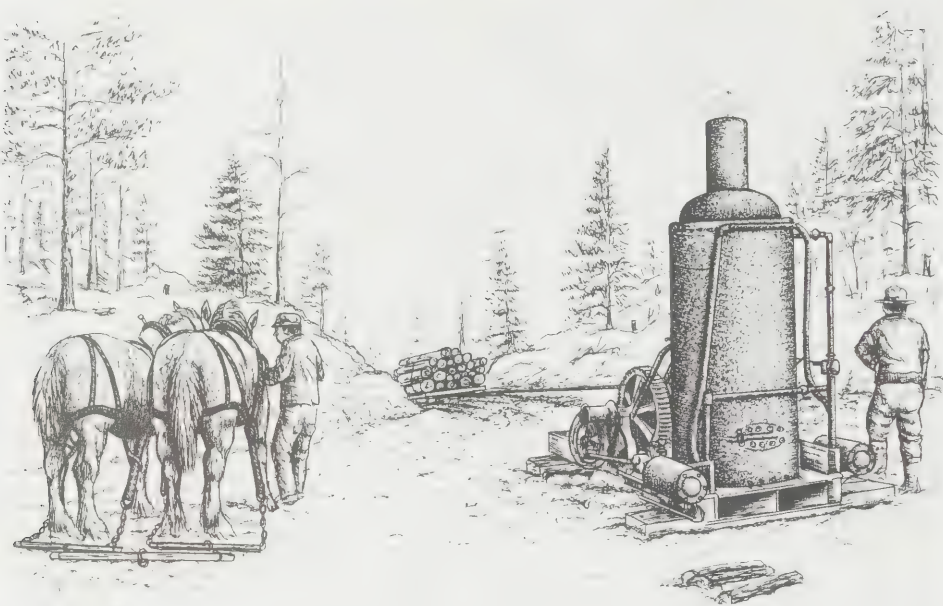
For all the "refinements" of a modern sawlog camp like this one, however, conditions were still pretty harsh by today's standards. The men were strictly forbidden to talk at the table, for example (that wasted the cook's time) and newly baked bread was withheld for a few days—so that no one would eat any more than "he really needed".

There are many men still alive today living in towns around Algonquin Park who well remember what conditions were like in the logging camps but, in another generation, those first-hand memories will be gone. With the advent of trucks and better roads, today's loggers no longer have to live away from their families. They commute every day from their homes—homes that look like, and have all the modern conveniences of, the houses of Park visitors away off in the city.



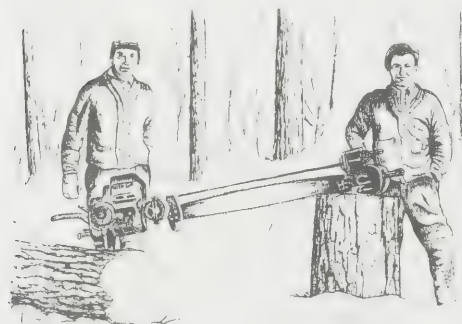
**The cook enforced a strict no-talking rule in the old sawlog camps.**

## Station 16 — From Muscle Power to Motor Power



**This donkey engine is pulling a loaded sleigh up a hill—something horses could not do.**

As in so many other fields of human endeavour, it was probably inevitable that mechanization would eventually come to logging and finally replace the old man-powered, horse-powered, and water-powered ways of doing things. The changes did not come overnight, however, and in many cases the first mechanical contraptions merely complemented the original tried and true methods in sometimes quite oddball combinations of new and old.



**One of the first two-man chainsaws.**

The first two-man chainsaws, for example, were much bulkier than the crosscut saws they replaced but, overall, they made the work of felling trees considerably easier. This was especially true for hardwood trees like maple and Yellow Birch then coming into demand for airplane production during World War II.

As for horses, their replacement was much more gradual. The two coal-fired, steam-powered donkey engines up ahead, for instance, were not used to actually replace horses but to help them.

One of the limitations of conventional logging had always been that horses could only pull loaded log sleighs downhill or on the level. Usually that didn't matter because the loggers wanted to get the logs down to a river or a lake anyway. Sometimes, however, it was desirable to haul logs up over a height of land and into another drainage basin. There, the company might have already established haul roads or river improvements for the later log drive.





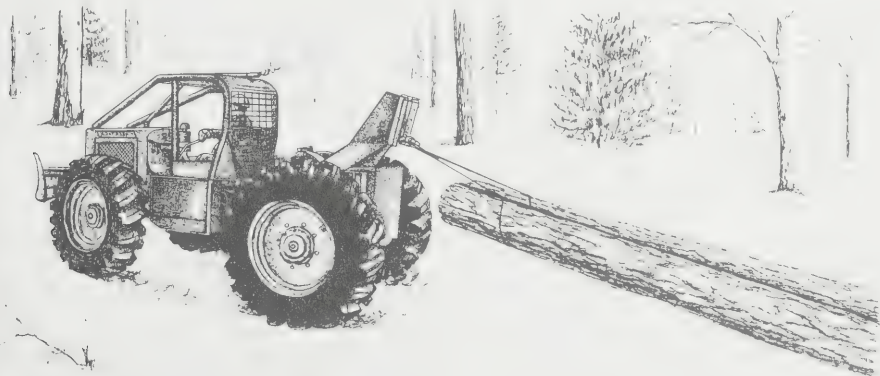
**The first trucks were used to pull log sleighs.**

Before being brought to the Logging Museum these particular engines were still in the bush near Proulx Lake (north of Opeongo) where they had been used in just such an operation back in the 1940s. For a few winters they huffed and puffed, pulling sleigh after loaded log sleigh up a long hill. As each one got to the top of the hill the cable was unhooked, the team of horses was hitched up again, and the log sleigh continued on its way—downhill from there on—all the way to Lake Opeongo.

A further step in the evolution of logging techniques occurred when the first trucks were introduced in the 1930s. At first they merely replaced horses as pullers of the traditional log sleighs. Only in the 1940s did trucks become big and powerful enough to actually carry logs

themselves.

The advent of trucks still didn't mean the end of horses. The men in the bush continued to use them for skidding logs out of the bush to the roadside log landings and to work the jammers that loaded the logs onto the truck-drawn sleighs or, later, the trucks themselves. Finally, however, even these uses of horses came to an end. The first mechanical skidders appeared in the forests of Algonquin in the 1950s. With their high chassis, huge tires, and "articulated" joints, they were able to travel into, and pull logs out of, almost any area imaginable. Today they are the standard beast of burden in Algonquin logging operations and horses are just a fading memory.



**In the 1950s mechanical skidders took over the last job done by horses.**



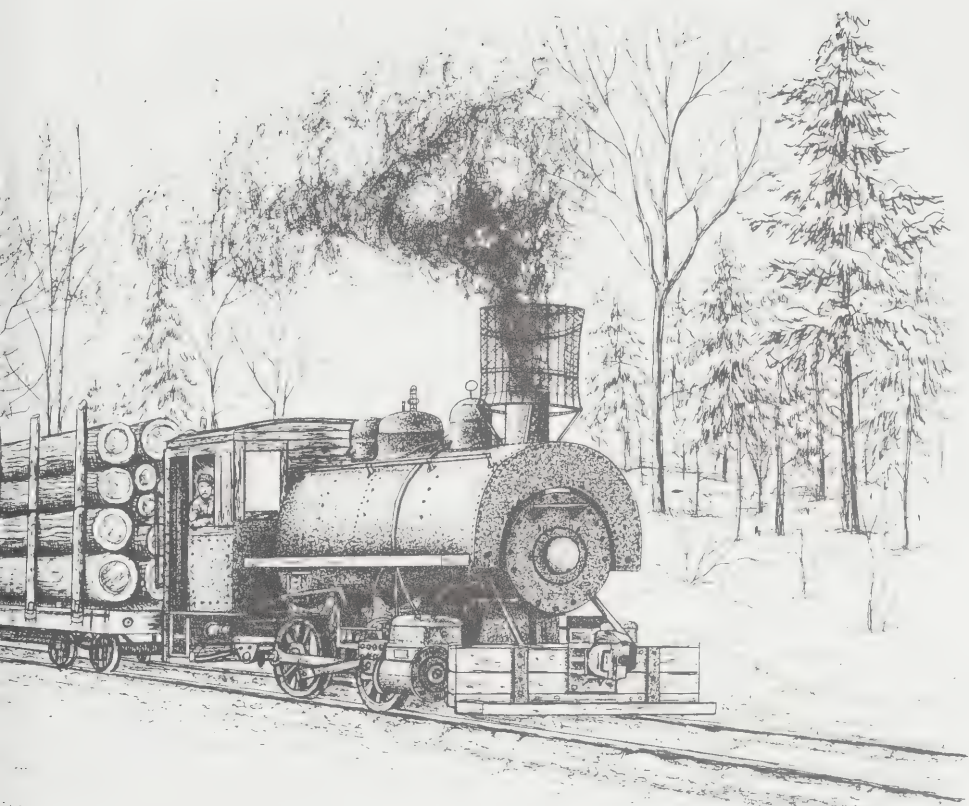
## Station 17 — Railways Through the Forest!

There were log drives on some Algonquin rivers as late as 1959 but long before that many logs began leaving Algonquin Park by rail. The main line was the Ottawa, Arnprior, and Parry Sound Railway completed in 1896 by the great timber baron, J.R. Booth, across the southern part of Algonquin just after the Park was established in 1893. The advantages of a dependable, year-round railroad over difficult, dangerous, and highly seasonal log drives are obvious and very soon Mr. Booth's line was carrying thousands of logs down to his mills at Ottawa. Indeed, with the further addition of trains carrying western grain from Parry Sound to Montreal, during the First World War, the Algonquin railroad was for a time the busiest in Canada, sometimes having trains go by every twenty minutes.

The railroad made transportation so much easier that enterprising loggers were soon building mills closer and closer to the sources of their log supplies—including right in the Park itself.

The St. Anthony Lumber Company began operations at Whitney, just south of here in 1895, almost as soon as the railroad had gotten that far, and a year later the Gilmour Company built a mill beside the railroad at the north end of Canoe Lake. The village of Mowat sprang up there to house employees of the Gilmour mill and at one point it had a population of 600 and almost 30 miles of railroad siding. That village and mill are long gone but many modern Park visitors are surprised to learn that other railroad sawmills persisted in the Park until quite recently. From 1931 to 1944, for example, the McRae Lumber Company





of Whitney had a major mill on the southwest shore of Lake of Two Rivers, not far from today's campground and the same company operated another mill at Whitefish Lake close to the Rock Lake Campground right up to 1979.

There were even spur lines off the main, trans-park railroad that were used to bring logs in from outlying areas. One such line, running from Whitney to the foot of Lake Opeongo, operated from 1902 to 1926. Highway 60 and the Opeongo Road were partly built on the abandoned line, and have therefore obliterated it, but in a few places you can see the old roadbed off to the side of the highway. Refer to the map in this guide and, when you leave the Logging Museum parking lot, watch for the old line where it intersects the Logging Museum entrance road just before you turn back out onto the highway.

Today, with virtually all long range log

transport done by trucks it is hard to believe that once there were several different railroads in Algonquin Park—including temporary affairs that ran on parallel tracks made of wooden poles. The double-flanged wheels you see at this station are from a "rail car" made to run on such a line.

The locomotive at this station was built in 1911 in Montreal. At first using wood as fuel and later converted to coal, it was called a "saddleback" because of the arrangement of the main water tanks over the boiler. It is representative of the type used on spur lines in the Park.

Today these exhibits are just reminders of a bygone era in Algonquin's logging history. Just as the tracks and locomotives spelled the beginning of the end for the original river drives, they themselves have been replaced by a newer technology—that of gas and diesel-powered trucks.

## Station 18 — Changing Times, Changing Thoughts

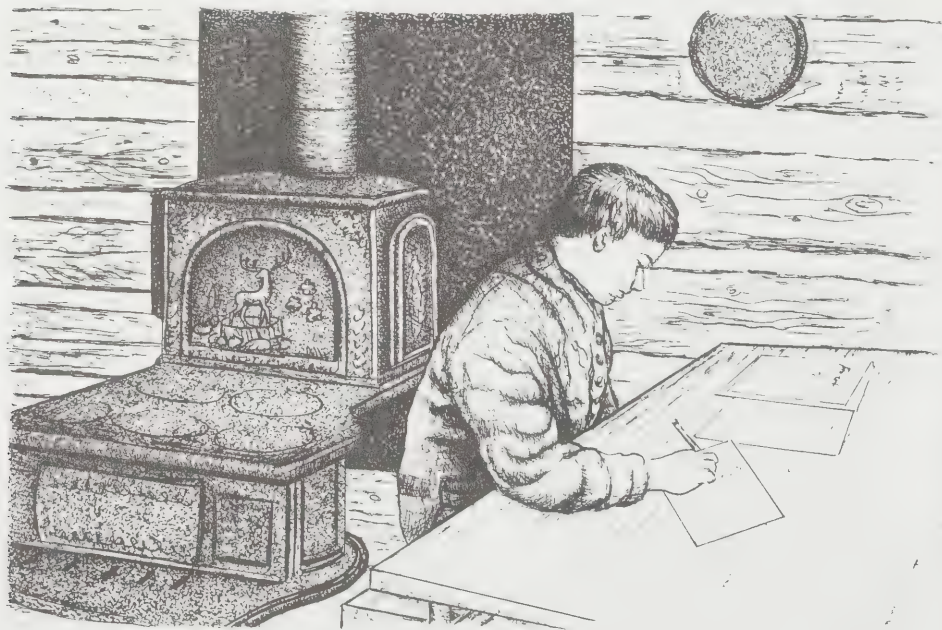
This old cabin was originally built as a camp office for the Booth Lumber Company and was later used as a ranger cabin. Please step inside and have a look at the display relating how Algonquin Park is managed today.

In particular you will see how the Ministry of Natural Resources attempts to reconcile the competing demands our society now places on Algonquin—demands that range from logging, to recreation, to the protection of natural environments.

It is obvious that logging started in the Algonquin area long before anyone ever thought of establishing a park. What is much less apparent nowadays, however, is that back in 1893, loggers actually welcomed the idea of a park. After all, the whole point of the new “Algonquin Forest Reserve and Park” was not to exclude logging—such an idea probably never occurred to anybody back then—but, rather, to create a wildlife preserve and, by stopping the advance of land-clearing settlers, to protect the headwaters of the six major rivers that originate in the Algonquin highlands.

This suited the loggers very well—to the point where one logging company actually requested that the borders of the new park be extended so as to include its cutting limits.

But, although no one saw any incompatibility between logging and the park idea when Algonquin was established, perceptions eventually began to change. As early as the 1930s Superintendent Frank MacDougall noted that a distinct clash was developing between the loggers and tourists and, in an effort to minimize contact between the two groups, he banned cutting on islands and along shorelines and portages. Things really came to a boil, however, in the 1960s. A new generation of Ontario residents was wealthier, more mobile, and more concerned about enjoying and preserving parts of the province's natural heritage. There was a boom in wilderness canoe-tripping and many people were genuinely shocked to learn that logging occurred in Algonquin Park. A protest group was formed (the Algonquin Wildlands League), meetings held, letters written and soon the





"Algonquin Park logging controversy" was in the headlines of newspapers across Ontario.

The government's response was to conduct over 40 studies on the Park and its resources and to appoint an advisory committee representing all interested groups under the chairmanship of Leslie M. Frost, a distinguished former Premier of Ontario. The committee held public meetings in Toronto and in communities near the Park, received hundreds of briefs from concerned citizens, and eventually made a long list of recommendations to the government that formed the basis for the 1974 Algonquin Park Master Plan.

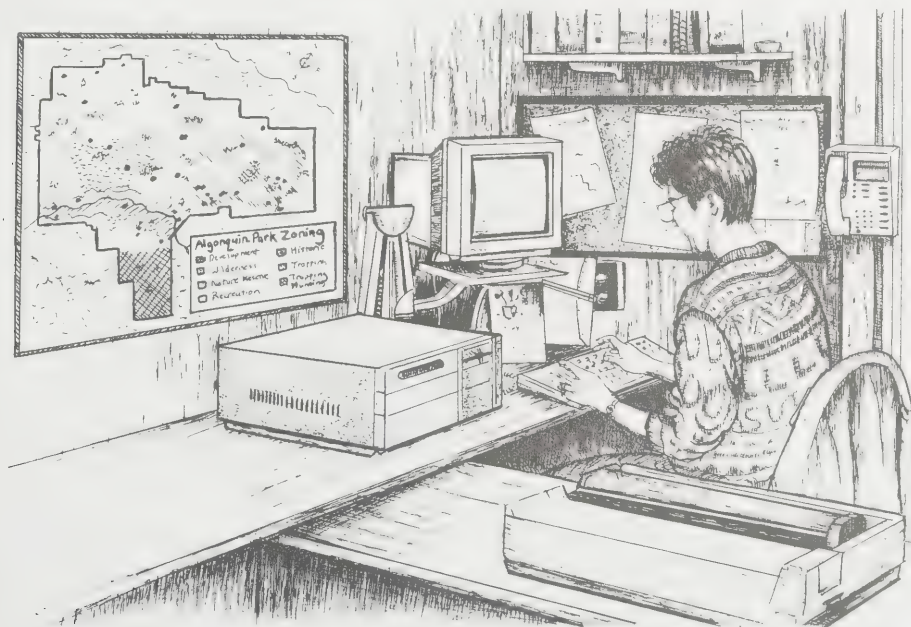
The fundamental aim of the new Plan was to retain logging because of its economic importance to the surrounding region, but to manage it in such a way that environmental values and the wilderness atmosphere of the Park would be respected.

The most important tool for accomplishing this is the division of the Park into zones, with logging permitted in about 75% of the Park, although separated from canoeists as much as possible by cutting reservations along

shorelines and portages and restrictions on road placement and hauling hours. The rest of the Park is reserved for wilderness, nature reserve, historic, and development zones.

A second major feature of the Master Plan (now called "Management Plan") was the cancellation of the previous patchwork of timber licences and the creation in 1974 of a crown agency called the Algonquin Forestry Authority which now supplies wood to 14 mills of 10 logging companies that used to do their own cutting in the Park. In 1983 the Authority also took over responsibility for timber management in Algonquin, a role formerly carried out by the Ministry of Natural Resources.

It goes without saying that no management policy or practice in Algonquin Park will satisfy everyone. The presence of logging continues to rouse strong passions in some people although the subject is much less controversial now than it was in the 1960s. Whether this will always be the case no one can tell. Attitudes towards logging have changed almost as much as the methods of logging and they almost certainly will continue to change in the future.



## Station 19 — How to Grow Trees



**Only scattered individual trees are cut in the “selection” system used to log Sugar Maple forests in Algonquin.**

This particular cabin was used for many years by the men who manned a fire lookout tower near the village of Madawaska about 20 km east of here. Later it was moved to Canisbay Lake in Algonquin Park and now, here at the Logging Museum, it houses an exhibit on today's logging methods.

Many people have the misconception that logging means clear-cutting, after which not a single tree remains standing. In some parts of the world, where foresters are trying to coax the highest possible wood production from tree species that grow best in full sunlight, a clear-cutting system is, in fact, the best approach. Here in Algonquin, however, most of our commercially valuable trees are not managed that way. Instead, cutting systems are used which deliberately leave large standing trees on the logged area.

One of the reasons is that Park forests are managed for much more than just the production of wood. Other objectives include the protection of deer habitat, the protection of hollow trees used by cavity-nesting birds and mammals and, most important of all, the protection of Algonquin's wilderness atmosphere so highly prized by tens of thousands of

canoeists.

Even from the narrow consideration of wood production, however, the best way to manage the commercially valuable tree species in Algonquin Park is by cutting only a few individual trees at a time.

Sugar Maple forests, for example, are managed under a “selection” system in which selected individual trees scattered throughout the forest are cut every 20 years.

This system gives the highest wood production because, after a cut, the remaining trees are then bathed in extra sunlight (thanks to the removal of their former competitors) and they put on a terrific growth spurt. After twenty years this growth is slowing down again but at that point the Algonquin Forestry Authority returns to prepare for another cut. First, technicians walk through the forest and paint-mark the individual trees which will be cut. When the selected trees are removed, the forest is once again returned to the more open spacing which favours another big growth spurt and twenty years later the loggers will return once again to harvest that new production.



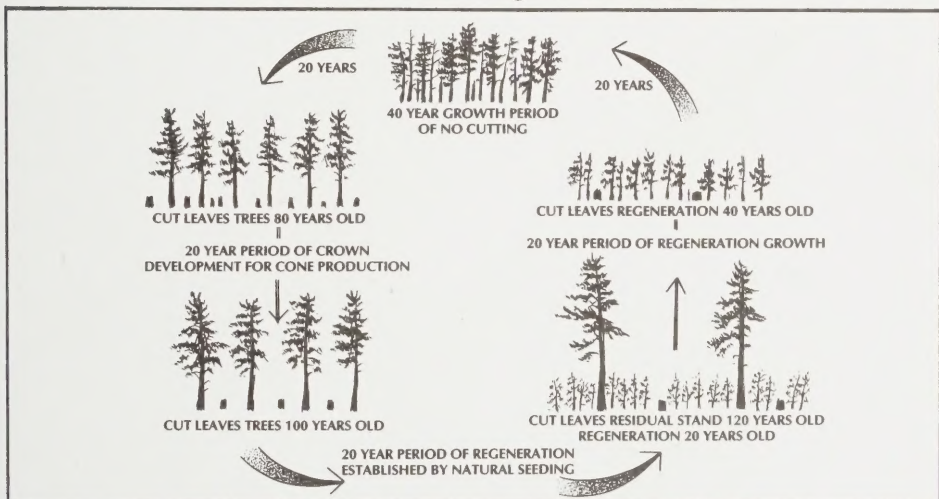
White Pine, the tree originally sought by Algonquin's first loggers, over 150 years ago, continues to be a commercially important tree in Algonquin—second, in fact, only to the Sugar Maple. White Pine, however, has to be managed in a special way because its seedlings require much more sunlight to get started than is afforded by the selection system used for Sugar Maple. For White Pine, the happy medium between too much and too little sunlight is often achieved by the so-called “uniform shelterwood system”.

In this approach, a mature pine stand is removed in a series of four cuts at 20 year intervals. Although these cuts thin out the stand more and more, the crowns of remaining trees expand after each cut and tend to keep the level of sunlight down on the forest floor below in the right range for encouraging the growth of

new White Pine trees.

The fundamental point, whether we are dealing with the selection system in hardwoods, the uniform shelterwood system in pines or some other system involving a different tree species, is that logging in Algonquin is just one part in a “management cycle”. Cutting is done in carefully researched ways that seek to preserve the forest's diversity and ability to support a full range of native wildlife while at the same time maximizing the land's production of desired tree species and to continue that production, cycle after cycle, on into the future. Moreover, the management systems used in Algonquin Park almost always mean that trees remain standing on the land at all times and many people would be hard pressed to realize that logging had even taken place in most areas just a few years later.

### Uniform Shelterwood Management of White Pine



## Station 20 — A Short Trail But a Long Road

You have now reached the end of the Logging Museum trail and are back at the Visitor Reception Building.

We hope you have found the exhibits interesting and that you have enjoyed learning a little of the long and fascinating history of logging in the Park—from its primitive beginnings back in the 1830s up to its present complexity and integration with the many other

demands placed on Algonquin.

If you have now finished with this guidebook, please put it in the box so that others may use it later. Or, if you wish to keep the guide, please put your payment in the money pipe if you have not already paid elsewhere.

Thank you and enjoy the rest of your visit to Algonquin Park.



## Other Algonquin Park Publications

This trail guide is only one of many publications produced by The Friends of Algonquin Park. The Friends is an independent registered charitable organization with a volunteer board of directors and was established in 1983 to assist the Park with its educational and interpretive programs.

The following is a list of other Friends' publications available at our two bookstores (located at the Visitor Centre and the Logging Museum) or by writing to the address below.

MAPS (1996) Price

Canoe Routes of Algonquin Provincial Park *	\$4.95
Backpacking Trails of Algonquin Provincial Park *	1.95
Petawawa River Whitewater Guide	5.95
Madawaska River and Opeongo River Whitewater Guide	5.95

### BOOKS

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Published by:



The Friends of  
Algonquin Park  
P.O. Box 248  
Whitney, Ontario  
K0J 2M0

In cooperation with:



Ministry of  
Natural  
Resources

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1996

ISBN 1-895709-29-6



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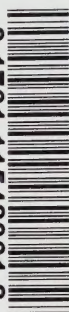
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